

## **Learning Set 3: The Whirligig Challenge TAG 3.3**

### **3.3 “Experiment with a Whirligig”**



**Read p. 47.**

**Today you will Run Your Experiment with your table group.  
As you do the experiment, record your results on the “Whirligig  
Experiment Results Page.”**

#### **Interpret Your Results**

**Read the section titled “Interpret your Results” on page 48.**

*What does it mean to interpret your results from an experiment?*

*What are the two things that you need to do to interpret your results?*

1.

2.

**Record the trends that you see and the claims that you feel you can make  
on Your Whirligig Experiment Results Page.**

**Read Communicate Your Results on pg. 48 and “Be a Scientist” on pgs.  
49-50.**

*What is an Investigation Expo?*

Name \_\_\_\_\_ Date \_\_\_\_\_ Hour \_\_\_\_\_

*What are the five things that scientists want to know about investigations?*

1.

2.

3.

4.

5.

**Read “Be a Scientist” on pg. 51.**

*What was your table group's independent (manipulated) variable? How many values/variations did you test?*

*What was your table group's dependent (responding) variable?*

*List the control variables your group used here:*

1.

2.

3.

4.

### **Investigation Expo**

**In your table group, you will make a poster with the materials your teacher gives you to prepare for your Investigation Expo.**

**As your groups create your poster, keep in mind the five things scientists want to know about investigations (listed above).**

Name\_\_\_\_\_ Date\_\_\_\_\_ Hour\_\_\_\_\_

**STOP to share your Investigation Expo posters with the class.**

*As you view your classmates' posters, complete the following chart.*

<i>Group</i>	<i>Claim/Results</i>	<i>Was it a fair test?</i>	<i>Questions</i>

**Reflect** *Answer the following questions with your table group.*

- 1. What variables were you investigating in your experiment? What were you investigating about that variable? How did you vary it to determine its effects?*
- 2. List all of the variables that you tried to hold constant in your experiment.*
- 3. How many trials did you perform? Explain why you performed that number of trials. Was this a good number of trials?*

4. *How consistent was your set of data? Why is consistency in repeated trials important in an experiment?*
5. *Do you think that the data you collected was useful in determining the effect your variable had on the fall of the whirligig? Explain why or why not.*
6. *What do you think you now know about how things fall that would allow you to design a better whirligig than the one you started with? Do you know enough to explain your results?*



**What's the Point?** Read p. 52 with your table group.

*List two reasons why it is important to present your investigation results to other scientists.*

1.

2.